WE CLAIM:

1. A method for detecting a selected drug in a biological sample comprising individual specific antibodies and identifying a source of the biological sample comprising:

immobilizing multiple antigens in a preselected pattern on a solid support, thereby forming an array;

immobilizing a detectable amount of the selected drug on the solid support;

providing an antibody-enzyme conjugate comprising an antibody that binds the selected drug and an enzyme that catalyzes a reaction that converts a colorigenic substrate into a colored product, and contacting the solid support having the multiple antigens and selected drug immobilized thereon with the biological sample such that individual specific antibodies in the biological sample bind at least some of the multiple antigens, thereby forming immune complexes, and the antibody-enzyme conjugate binds to (i) the selected drug immobilized on the solid support, thereby forming immobilized antibody-enzyme conjugate, and (ii) any selected drug that may be present in the biological sample, thereby forming soluble drug-antibody-enzyme conjugate;

then washing the solid support, thereby removing any individual specific antibodies, antibody-enzyme conjugate, selected drug, and soluble drug-antibody-enzyme complexes not immobilized on the solid support;

detecting the immune complexes immobilized on the solid support, thereby forming an antibody profile characteristic of the source of the biological sample, and contacting the solid support with the colorigenic substrate such that the enzyme catalyzes conversion of the colorigenic substrate to the colored product; and

determining an amount of the colored product present, wherein said amount of the colored product is inversely correlated with an amount of the selected drug in the biological sample such that a reduction in the amount of the colored product indicates detection of the selected drug in the biological sample, and comparing said antibody profile to one or more candidate antibody profiles from candidate sources, wherein a match of the antibody profile to said one or more candidate antibody profiles identifies the source of the biological sample.

2. The method of claim 1 wherein said selected drug is marijuana.

3. The method of claim 1 wherein said selected drug is cocaine.

4. The method of claim 1 wherein said selected drug is methamphetamine.

5. The method of claim 1 wherein said selected drug is amphetamine.

6. The method of claim 1 wherein said selected drug is heroin.

7. The method of claim 1 wherein said selected drug is methyltestosterone.

8. The method of claim 1 wherein said selected drug is mesterolone.

9. The method of claim 1 wherein said biological sample is a member selected from the group consisting of tissue, blood, saliva, urine, perspiration, tears, semen, serum, plasma, amniotic fluid, pleural fluid, cerebrospinal fluid, and mixtures thereof.

10. The method of claim 1 wherein said biological sample comprises tissue.

11. The method of claim 1 wherein said biological sample comprises blood.

12. The method of claim 1 wherein said biological sample comprises saliva.

13. The method of claim 1 wherein said biological sample comprises urine.

14. The method of claim 1 wherein said biological sample comprises perspiration.

15. The method of claim 1 wherein said biological sample comprises tears.

16. The method of claim 1 wherein said biological sample comprises semen.

17. The method of claim 1 wherein said biological sample comprises serum.

18. The method of claim 1 wherein said biological sample comprises plasma.

19. The method of claim 1 wherein said biological sample comprises amniotic fluid.

20. The method of claim 1 wherein said biological sample comprises pleural fluid.

21. The method of claim 1 wherein said biological sample comprises cerebrospinal fluid.

22. The method of claim 1 wherein said multiple antigens comprise HeLa cell antigens.

23. The method of claim 1 wherein said multiple antigens comprise a random peptide library.

24. The method of claim 1 wherein said multiple antigens comprise an epitope library.

25. The method of claim 1 wherein said multiple antigens comprise a random cDNA expression library.

26. The method of claim 1 wherein said solid support comprises glass.

27. The method of claim 1 wherein said solid support comprises silicon.

28. The method of claim 1 wherein said solid support comprises silica.

29. The method of claim 1 wherein said solid support comprises a polymeric material.

30. The method of claim 29 wherein said polymeric material comprises poly(tetrafluoroethylene).

31. The method of claim 29 wherein said polymeric material comprises poly(vinylidenedifluoride).

32. The method of claim 29 wherein said polymeric material comprises polystyrene.

33. The method of claim 29 wherein said polymeric material comprises polycarbonate.

34. The method of claim 29 wherein said polymeric material comprises polymethacrylate.

35. The method of claim 1 wherein said solid support comprises a hydrophilic inorganic material.

36. The method of claim 35 wherein said hydrophilic inorganic material comprises alumina.

37. The method of claim 35 wherein said hydrophilic inorganic material comprises zirconia.

38. The method of claim 35 wherein said hydrophilic inorganic material comprises titania.

39. The method of claim 35 wherein said hydrophilic inorganic material comprises nickel oxide.

40. The method of claim 1 wherein said solid support comprises a ceramic material.

41. The method of claim 1 wherein said enzyme comprises alkaline phosphatase.

42. The method of claim 1 wherein said enzyme comprises horseradish peroxidase.

43. The method of claim 1 wherein said detecting the immune complexes immobilized on the solid support comprises: contacting said immune complexes with primary antibodies configured for binding said immune complexes, wherein said primary antibodies are from a species different than the individual specific antibodies, such that at least some of said primary antibodies bind to said immune complexes; rinsing the solid support to remove primary antibodies not bound to immune complexes; contacting said primary antibodies bound to said immune complexes with enzyme-conjugated secondary antibodies configured for binding said primary antibodies, wherein said secondary antibodies are from a species different than the individual specific antibodies and the primary antibodies and wherein said enzyme catalyzes a reaction that converts a colorigenic substrate into a colored product, such that said enzyme-conjugated secondary antibodies bind to said primary antibodies; rinsing the solid support to remove enzyme-conjugate secondary antibodies not bound to said primary antibodies; and contacting the enzyme-conjugated secondary antibodies with the colorigenic substrate such that the

colored product is produced, thereby detecting the immune complexes immobilized on the solid support.

44. A method for analyzing biological material comprising individual-specific antibodies, comprising:

forming an array of multiple antigens by attaching the multiple antigens to a surface of a solid support in a preselected pattern such that locations of said multiple antigens on the solid support are known;

obtaining a sample of the biological material and contacting the array with the sample such that at least a portion of the individual-specific antibodies contained in the sample reacts with and binds to the multiple antigens in the array, thereby forming immune complexes;

washing the solid support containing the immune complexes such that antibodies in the sample that do not react with and bind to the multiple antigens in the array are removed; and

detecting the immune complexes and determining the locations thereof such that an antibody profile is obtained.

45. The method of claim 44 wherein said attaching comprises covalent bonding.

46. The method of claim 44 wherein said biological material is a member selected from the group consisting of tissue, blood, saliva, urine, perspiration, tears, semen, serum, plasma, amniotic fluid, pleural fluid, cerebrospinal fluid, and mixtures thereof.

47. The method of claim 44 wherein said solid support comprises glass or silica.

48. The method of claim 44 wherein said detecting comprises treating the solid support having immune complexes attached thereto such that the presence of immune complexes at a location is characterized by a color change as compared to the absence of immune complexes at the location.

49. The method of claim 44 wherein said detecting further comprises monitoring the solid support with solid state color detection circuitry for comparing color patterns before and after contacting the array with the sample.

50. The method of claim 44 wherein said detecting further comprises obtaining a color camera image before and after contacting the array with the sample and analyzing pixel information obtained therefrom.

51. The method of claim 44 wherein the solid support is a surface plasmon resonance chip and said detecting further comprises scanning the surface plasmon resonance chip before and after contacting the array with the sample and comparing data obtained therefrom.

52. The method of claim 48 wherein said color change comprises fluorescence or luminescence emission, and said detecting comprises obtaining an image using a charge-coupled device.

53. The method of claim 44 wherein said array comprises a first subset of antigens configured for obtaining an antibody profile and a second subset of at least one antigen configured for assaying for a selected analyte in the sample.

54. The method of claim 53 wherein said selected analyte is a drug.

55. The method of claim 54 wherein said drug is marijuana.

56. The method of claim 54 wherein said drug is cocaine.

57. The method of claim 54 wherein said drug is methamphetamine.

58. The method of claim 54 wherein said drug is methyltestosterone.

59. The method of claim 54 wherein said drug is mesterolone.

60. The method of claim 44 wherein said biological material is from a forensic sample and the antibody profile obtained therefrom is compared to an antibody profile prepared from a biological sample obtained from a suspect.